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ABSTRACT

A basic consideration in conducting a career education needs assessment is whether to select published tests or to develop new instruments and evaluation techniques. Advantages of published tests are availability and convenience and ease to use. Advantages in using self-developed measures can be seen by examining a needs assessment study in which both types are used. In a fall 1976 needs assessment for career education in upstate New York, ninth and twelfth graders were administered the attitudes section of the Career Maturity Inventory (CMI), and they and their parents also responded to a project-developed questionnaire. Interpretation of CMI results was that the average student needed supplemental career education and guidance slightly less than the average student in the nation. The questionnaire asked questions concerning parental influence and school influence on career decisions. Data suggested that parents and children agreed on need for parental influence but disagreed regarding amount, usefulness, and quality of parents' information. The public felt the school was not doing sufficient work in career education, and more effective information dissemination and parental education were needed. A comparison of needs assessment information obtained from the two tests indicates that the self-developed questionnaire provided the most meaningful, useful information. (YLB)

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NEEDS ASSESSMENTS IN CAREER EDUCATION: ALTERNATIVES TO PUBLISHED TESTS

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Abstract

Published tests are usually considered to be more useful than self-developed measures for conducting career education needs assessments. This paper compares the merits of these two types of instruments using data from a recently conducted needs assessment in career education. It is concluded that while published instruments can be useful, they are not the most appropriate choice for many needs assessments. Self-developed measures have the potential of providing much useful information and should be a more frequent method of choice in doing career education needs assessments -- as an addition to or a substitute for published measures.

NEEDS ASSESSMENTS IN CAREER EDUCATION:
ALTERNATIVES TO PUBLISHED TESTS

Before a new educational program is designed or implemented, it is essential that the needs of the target population be assessed (Klein, Fenstermacher and Alkin, 1971; Stufflebeam, Foley, Gephart, Guba, Hammond, Merriman and Provus, 1971; Gallagher, Surles and Hayes, 1973). This needs assessment should provide information that can be used by both administrators and program developers. As a result of the needs assessment, administrators should be in a better position to determine whether or not a program is warranted. The needs assessment data should provide program developers with insights regarding the nature of the area and possible intervention strategies. Obviously, most needs assessments will not prescribe a detailed training program or instructional system; but, a properly designed and effectively executed needs assessment should provide system designers with a set of intervention ideas that otherwise would not have been available.

During the last decade there has been a great deal of emphasis placed on career education and guidance programs (Bell and Hoyt, 1974; USOE, 1975; Hoyt, 1975). Career education funding, programs, curricula and research have increased dramatically (ERIC's Research in Education Index lists 62 entries in the area of Career Education and Guidance in 1968 and more than 1000 references in 1976). As this emphasis continues it is critical that more careful attention be directed to the instruments and methodologies employed by educators in the assessment of student's

career guidance needs. One of the most basic considerations in conducting any needs assessment is the selection of appropriate measurement tools. During this selection process evaluators must determine whether to use published tests or to develop new instruments and evaluation techniques. The purpose of this paper is to weigh the benefits of each of those alternatives. Data will be presented from a recently conducted career education needs assessment which will illustrate the merits of self-developed tests vs. published tests.

Assessment Alternatives in Identifying Needs

Evaluators and school administrators often choose to administer published instruments rather than developing new assessment tools. The advantages of published tests which are probably responsible for such frequent selection are impressive:

1. Published instruments are readily available. Instrument development can be a time-consuming and costly endeavor while the cost associated with ordering a previously published instrument is almost always reasonable. The overall savings in time and money are undeniable.
2. Published instruments are convenient and easy to use. They come complete with instructions and scoring procedures. Many companies will provide a scoring service for a nominal charge. With only a few hours of work, the results can be ready for interpretation. Some companies even offer individual diagnostics and aid in the interpretation of results.

3. The results of published tests have a credibility that self-developed instruments often lack. Most published tests have been developed by professionals over a number of years and have been used extensively.

In spite of these advantages, the decision to use a published test instead of a self-developed measure should not be an automatic reaction whenever a needs assessment is being planned. Frequently a self-developed measure will provide more useful information than the best available published test. This is not because the previously mentioned advantages of published tests are untrue, but rather, because these advantages can be outweighed by a single disadvantage - published tests do not always meet the unique information needs of the particular circumstance.

The intent of that statement is not to villanize publishing companies or to imply that they have secretly conspired to increase their profits by convincing an unsuspecting public of fabricated advantages. The advantages in using published tests are well documented. But few publishing companies or authors would claim that their tests do all of the things for which people sometimes use them. When published tests are used for other purposes than those for which they were specifically developed, it is not surprising that the utility and meaningfulness of the results decline. The farther the actual use is removed from the use for which the test was intended and developed, the less meaningful the results.

The choice to use a published instrument, or one that is self-developed, or some combination should depend on several criteria: a) a

careful analyses of the unique types of information needed; 2) a comparison of those needs with the information which can be provided by each alternative test; 3) a consideration of how much time and expertise is available for test development; and, 4) an understanding that it is not necessary to be highly trained in psychometrics in order to gather useful information in a reasonable amount of time. Considering these factors, self-developed measures will frequently be a method of choice in conducting career education and guidance needs assessments -- either as a replacement or a supplement for other published measures. The advantages which can come from the use of self-developed measures can be seen by examining an actual needs assessment study conducted by the authors in which both types of measures were used.

A Career Education Needs Assessment

In the fall of 1976, a suburban school district in upstate New York was concerned about upgrading their career education program for grades 9-12. Before commencing a major effort of program development, the district's school board and central administration requested that a needs assessment be conducted to determine the extent and nature of the need for an expanded effort in the area. Sixty-four 9th grade students and forty-four 12th grade students were chosen to be representatives of the district's population and asked to participate in the needs assessment. The students were given a widely used published measure of career maturity. In addition, each of the students and their parents responded to a short questionnaire which was developed specifically for the project.

Results of the Published Instrument

Each of the students completed the attitudes section of the Career Maturity Inventory (CMI, Crites, 1973). This part of the CMI is one of the most widely used measures of career maturity. It is easily obtainable, reasonably priced, convenient to use, and comes complete with administration and scoring instructions, national norms, and an optional scoring service from the publisher. Because of its wide use, it has a high degree of credibility among most educators. Since it had been used in other similar situations, it was a logical choice as a way of assessing how much need there was among the district's students for an expanded or revised effort in career education and guidance.

Insert Table 1 about here

According to the results shown in Table 1, the average student in this school district is slightly more mature about making career decisions than is the average person of comparable grade level in the United States. The item level data gives more specific information. As can be seen almost all students think that job choice ought to be consistent with a person's beliefs, is not an accidental occurrence and that there are multiple appropriate jobs for any one person. Substantial numbers of students think that work is of worth mostly for what it allows a person to buy. About 1/4 to 1/3 of the students seldom think about a future occupation and about the same number of students frequently change their occupational choice.

How useful are these results for the district? One interpretation is that the average student in the district needs supplemental career education and guidance slightly less than the average student in the nation. If we examine the individual questions in hopes of finding substantial subgroups of students who have particular needs, we find little additional information. Neither the decision makers nor the program designers have the type of information they need. If the district had been dependent only on the CMI as a needs assessment tool, at best they would know little more at the end than they did at the beginning. At worst, they might incorrectly conclude that since the district's average score in career maturity was higher than the national average, career education and guidance should not be a priority in the district.

Results of a Self-Developed Questionnaire

The second part of the needs assessment consisted of a questionnaire which had been developed within the district. This questionnaire was administered to the same students who had taken the CMI. Additionally, the parents of those students were asked to respond to a telephone interview consisting of questions which were parallel to the ones completed by the students. The questions as they were asked to parents are shown in Table II.

Insert Table 2 about here

The answers to these questions by both parents and students can be broken into two broad categories: 1) parental influence on career decisions; and, 2) school influence in career decisions.

Parental influence on career decisions

Approximately two-thirds of 9th and 12th grade students and their parents felt that "some" or "a lot" of parental influence was appropriate in making career decisions. More than 90% of the respondents agreed that most of the career related interaction between parents and children which is now occurring is spontaneous instead of planned. Although most parents were unaware of current community or school resources, three-quarters of them said they would be interested in participating if the school were to provide programs for aiding parents in career counseling.

The data also show that parents and students disagree to a significant extent about the amount and usefulness of interaction and how well informed the parent is about career counseling. The average parent estimated that 13 hours was spent during the last year talking with the student about what the student was going to do following graduation from high school. The average student estimated less than one-fourth this much time (3 hours). Approximately 25% of the 12th grade students think that their parents are not very well informed regarding career education and that conversations with their parents are not very useful. Additionally, as the students progress from 9th to 12th grade, the parents see themselves becoming better informed and the conversations becoming more useful, while students see their parents becoming less well informed and the conversations becoming less useful. Also, students who view their parents as being well informed are much more likely to talk with their parents about career related decisions. Thirty-nine percent of the parents of 9th graders and 13% of the parents of 12th graders disagreed

with their child about whether he was planning to go to work or continue his schooling following graduation from high school.

These data suggest a number of things about the influence of parents on the career decision making process of their children. First, parents and students agree that there is a need for more parental influence in career education. But, significant disagreement exists about the amount and usefulness of the present interaction as well as the quality of the parents' information. These data indicate a lack of understanding as well as miscommunication between parents and their children about what career education involves, what the students need to know and what experiences the students have already had. These problems are compounded by the spontaneous nature of the majority of the present interactions between parents and their children. Secondly, current resources and programs which are available to help parents in the career education process are either insufficient or are not well enough publicized.

School influence on career decisions

Approximately half of the students and parents felt that the school has had no influence on the career decisions of students and 60% felt that the school should be doing more in this area. Part of this can be attributed to a lack of knowledge on the part of parents of what the school is presently doing. For while most students (73%-75%) can name at least two resources which are provided by the school or community to aid parents in helping their children in making career decisions, more than half of the parents could not name a single resource. There is also evidence that a significant number of parents see the school and not themselves as the primary agent in providing career education.

These data suggest two important things for the school to consider in reappraising its career education programs. First, in the eyes of the public, whom they serve, the school is not doing sufficient work in the area of career education. And secondly, more effective ways of information dissemination and parental education are needed. This is particularly important if, as the previous data suggest, a decision is made to help parents become more involved in the career decision making process of their children. It is also clear that careful thought will have to be given to the potential and most appropriate roles of both parents and the school in meeting career education goals.

Summary

In comparing the needs assessment information obtained from the self-developed questionnaires with that of the published measure, it is clear that the most meaningful and useful information was provided by the self-developed measures. The results of the published test indicating that most of the students in the district were above the national average could easily be interpreted to mean that this is not a priority area for additional work at the present time. The results of the self-developed instrument however, suggested that parents and students feel that there is an urgent need for additional emphasis in the area of career education as well as pointing out a number of areas which should be considered in any such development. Had the needs assessment been limited to the use of the published instrument the district would have

gained little useful information and may even have arrived at incorrect conclusions.

The important point is not that published tests are worthless. Obviously, published tests have added an entire dimension to education. Because they are readily available, convenient to use and professionally developed, published tests have allowed us to do useful and important things which otherwise would be impossible. But it is essential to understand that even a good published test does not do things for which it was not designed. Unless the purposes of the needs assessment match closely with what the test was designed to do, the use of the "best" published test will result in information which is at best, not helpful; and, at worst, misleading. When this happens, all of the advantages of published tests are of little comfort to the decision maker.

Self-developed and project tailored needs assessment instruments and procedures should be used more frequently in addition to or as replacements for published measures. All of the dangers in using a published measure are still present; but, they are subject to greater control. As with published tests, self-developed measures need to be constructed thoughtfully and carefully, the questions they ask need to match the objectives of the needs assessment and they must provide information which is useful in making decisions. Obviously the construction of such measures will require time and skill. But the time is often not prohibitive and the required skill is often internally available.

As a needs assessment is designed, careful thought should be focused on the specific purposes of the assessment and the advisability of constructing instruments tailored to those purposes. If this type of attention is given to the selection and development of measurement tools, career education assessment will be enhanced and the goals of career educators, parents and students will more likely be achieved.

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Table 1

Results of the Attitudes Section of the Career Maturity Inventory-Total Test and Selected Item Scores

Total Test Scores

New York Sample		National Sample	
9th Grade	12th Grade	9th Grade	12th Grade
33	37	32	34

Selected Item Scores[a]

	New York Sample	
	9th Grade % Yes	12th Grade % Yes
3. I plan to follow the line of work my parents suggest	14	7
8. Work is worthwhile mainly because it lets you buy the things you want	47	40
14. Work is dull and unpleasant	6	14
23. I seldom think about the job I want to enter	22	39
31. There is only one occupation for each person	5	0
36. You get into an occupation mostly by chance	6	7
46. You should choose a job which allows you to do what you believe in	95	89
48. I keep changing my occupational choice	28	30

[a]Because of space limitations, only selected data is depicted here. Complete item level data can be obtained from the authors upon request.

Table 2

Questionnaire Used with Parents in Career Education Needs Assessment

1. How often do you talk with _____ about what s(he) will do after graduating from high school?

   Could you estimate how many hours per (week), (month), (year)?

a) none b) 1-5 c) 6-10 d) 11-15
   e) 16 or more

2. Who usually starts the conversation?

a) student b) Mom c) Dad Both

3. Would you describe these conversations as:

   a) spontaneous b) planned

- for instance, does it come up around the dinner table (spontaneous) or is it planned in advance?

4. How well informed do you feel in talking with _____ about career decisions?

a) very well b) somewhat well informed
   c) not very well

5. How useful would you say these conversations are in helping _____ make career decisions?

a) very useful b) somewhat useful
   c) not very useful

6. What does _____ plan to do following graduation from high school?

   a) work b) further schooling

7. How definite is his/her decision?

a) very definite b) somewhat definite
   c) not very definite

8. When did s(he) make that decision?

a) this year b) 1-2 yrs ago
   c) 3-4 yrs ago d) 5+ yrs ago

9. How much influence has the school (counselors, teachers, etc.) had on _____'s career decision?

a) none b) a little bit c) some
d) a lot

10. Would you say that the amount of influence the school has had has been:

a) not enough b) about right c) too much

11. Would you be interested in participating if the school were to provide programs for aiding parents in career counseling?

a) yes b) maybe c) no

12. How much influence would you say that you (as parents) have had on _____'s career decisions?

a) none b) a little bit c) some
d) a lot

13. Would you say that the amount of influence you have had has been:

a) not enough b) about right c) too much

14. Are you aware of any resources that exist in the community and school district to aid you and your child in making his/her career decision?

Can you name any of them?

(0) (1) (2) (3) (4)

15. Have you participated in any of the programs provided by the district and community for career development?

a) Yes b) No

16. How helpful did you find them for you and _____.

a) very helpful b) somewhat helpful
c) not very helpful